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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
07/356,740	05/25/89	POLAN	G 590347

PANITCH SCHWARZE JACOBS AND NADEL
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PHILADELPHIA, PA 19103

EXAMINER

ELLIS, C

ART UNIT

PAPER NUMBER

015

2

DATE MAILED:

12/20/89

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input checked="" type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-12 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-12 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit 315

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Concealed Sprinkler With Drop down Deflector Assembly And Improved Fusible Valve Lever Assembly.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-12 are rejected under 35 U.S.C. 103 as being unpatentable over Martin in view of Lynde, Newton, and Knight.

Martin discloses a sprinkler head comprising all the features of the claimed invention except: a frame having freed arms with a fusible and adjustable compound lever arrangement mounted therein so not to impose any tension or compression forces on said arms. Lynde, in the art of fire extinguishing sprinklers, shows a compound lever arrangement with a fusible link where the

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upper lever works in conjunction with the lower lever in order to keep the valve sealed until an elevated temperature breaks said fusible link (see fig. 3). Also, note Newton teaching a valve lever assembly wherein the compressive forces are being applied to the body of the sprinkler, rather than the free arms of frame (13). See figure 1. It is considered to have been obvious for one of ordinary skill in the art to substitute, in view of Newton, the lever mechanism taught by Lynde, for the lever arrangement of Martin in a position located at the upper part of the sprinkler body in contact with the valve (16), so as to provide a heat actuatable mechanism that will not add undesired stress to arms 26 and 27, thus enabling a lighter construction of said arms, resulting in a lighter, more compact sprinkler head.

Further, Martin's sprinkler head as modified by Lynde and Newton, lacks means for adjusting the compression force imposed on the valve by the lever system.

Knight, in the art of frangible links, shows force adjusting means consisting of a screw (d) or (dl) (see figs. 3, 4 and 9). It is deemed an obvious variant for an ordinary skilled artisan to have incorporated the adjusting screw taught by Knight into the modified sprinkler head of Martin for the purpose of providing a force and sensitivity adjusting means within the valve lever apparatus.

The following extra references are being cited as

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disclosing pertinent information regarding the claimed invention:

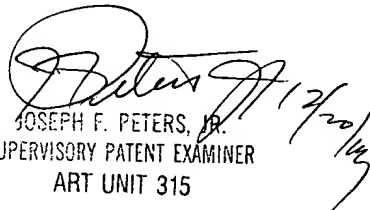
Gloeckler discloses a sprinkler wherein the body (15) is relieved of any valve lever compression forces, and Blum et al. shows a sprinkler comprising a compound valve lever arrangement (see fig. 1).

Any inquiry concerning this communication should be directed to Christopher P. Ellis at telephone number 703-557-3618.

Ellis:mw

12/15/89

CPE
12/18/89


JOSEPH F. PETERS, JR.
SUPERVISORY PATENT EXAMINER
ART UNIT 315